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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/588,477

08/01/2006

Jens Foegler

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04/04/2011

PROPAT, L.L.C.

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CHARLOTTE, NC 28211-2841

EXAMINER

JACOBSON, MICHELE LYNN

ART UNIT

PAPER NUMBER

1782

MAIL DATE

DELIVERY MODE

04/04/2011

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/588,477	FOEGLER ET AL.	
	Examiner	Art Unit	
	MICHELE JACOBSON	1782	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 January 2011.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 6-16, 18-20, 22-24 and 26-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-16, 18-20, 22-24 and 26-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Examiner Notes

1. Any objections and/or rejections made in the previous action, and not repeated below, are hereby withdrawn.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-4, 6-16, 18-20, 22-24 and 26-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ito et al. European Patent Application Publication No. 408164 (hereafter referred to as Ito) and Barmore et al. U.S. Patent Application Publication No. 2001/0008658 (hereafter referred to as Barmore).
4. Ito teaches a water-resistant matrix web with a food flavoring material disposed on it comprising food flavoring material dispersed on a binder material. (Pg. 2, lines 27-30) The water resistant matrix web is recited to be comprised of natural or artificial fiber

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materials such as polymers of cellulose and other natural materials (viscose, acetate, etc), polyester, polyamide, polyethylene, polypropylene and viscose coated Manilla paper. (Pg. 2, lines 37-44, 56) Webs produced from such natural or artificial fibers are interpreted by the examiner to read on the textile and consolidated nonwoven support layers recited in claim 1 since the web is made out of fibers which is the definition of a textile and is nonwoven as recited.

5. The food layer is recited to include herbs, pepper, cheese powder and powders of vegetable extracts. (Pg. 3, lines 8-17) The binder layer for the flavoring material is recited to be comprised of polysaccharides such as starch, modified starch, carboxymethylcellulose and protein such as gelatin. (Pg. 3, lines 22-28) The selection of these materials is recited to result in the food layer being neatly transferred onto the surface of the food disposed in a casing made of such a laminate.

6. The laminate is produced by applying a solution of the binder layer material to the matrix web followed by applying the food layer material in a powdery, granular or chip form onto the coated web and drying the thus formed sheet material. The formed sheet may then be formed into a tube for use as a sausage casing by heat sealing the film or by joining the edges of a non-heat-sealable film with the aid of an adhesive tape. (Pg. 3, lines 33-42) When the sheet is brought into contact with a web substrate food, the food material is transferred from the matrix to the substrate food, thus effectively flavoring or spicing the food. (Pg. 4, lines 7-9)

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7. Ito is silent regarding the transfer layer being transferred completely onto a foodstuff, the textile support further comprising a barrier layer and a water soluble layer between the textile support and the transfer layer.

8. Barmore teaches a packaging film comprising a first thermoplastic layer which can be coated with a second edible film layer which is transferred to a product during cooking comprising a binder, an additive and a crosslinking agent. (Para. 8, 11) The film is adhered to the meat product such that upon removing the film from the meat product, the edible film layer remains adhered to the meat product. (Para. 33) The binder and the crosslinking agent provide cohesion of the coating. (Para. 196) Additionally, the nature of the binder along with the crosslinking agent is believed to control the rate of hydration of the coating allowing the coating to remain intact against the flow of high moisture meat product. (Para. 196)

9. The additive may comprise caramel, natural colorant, spice or citrate. (Para. 12) The binder may comprise a first binder including alginate, methyl cellulose and hydroxypropyl starch and a second binder comprising materials including albumin, zein, carageenan, casein, soy protein or wheat protein. (Para. 16)

10. The packaging film preferably further comprises a third layer between the first and second layer comprising the materials such as alginate and hydroxypropyl starch to serve as a release layer. (Para. 23) The packaging film of the invention is also recited to comprise a layer which serves as a barrier to oxygen. (Para. 28) The laminate of the invention is recited to be useful for production of casings such as fin-sealed, lap-sealed and butt-sealed casings for meat products. (Col. 32)

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11. Both Ito and Barmore are directed towards laminate films for transferring edible films to packaged meat products comprising polysaccharides and proteins. One of ordinary skill in the art would have been motivated to substitute the coating material recited by Barmore for the coating material disclosed in Ito because of the cohesion provided to the coating by the crosslinking agent disclosed in the coating of Barmore.

12. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have substituted the flavor transfer layer of Barmore for the flavor transfer layer disclosed in Ito. This substitution would have yielded the predictable result of producing a textile support based sausage casing comprising an edible flavor transfer layer with better properties of cohesion than that of the film recited by Ito by virtue of the crosslinker. “In *United States v. Adams*, . . . [t]he Court recognized that when a patent claims a structure already known in the prior art that is altered by the mere substitution of one element for another known in the field, the combination must do more than yield a predictable result.” *KSR*, 550 U.S.at ___, 82 USPQ2d at 1395.

13. The obvious substitution of the coating disclosed by Barmore consisting of edible binder, flavoring and crosslinking agent for the transfer coating recited by Ito would have produced the same invention as claimed in claims 1-4, 6, 7, 10, 11, 15, 16, 18 and 19 produced by the method recited in claims 12, 13 and 20.

14. Regarding claims 8, 9 and 14: Barmore clearly discloses utilizing an oxygen barrier layer for the food packaging film recited. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have included an

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oxygen barrier layer in the laminate disclosed by Ito to prevent degradation of the packaged food by oxygen. Since the barrier layer would obviously not be transferred to the packaged food, one of ordinary skill would have provided it on the support layer recited by Ito prior to coating the support with the transfer layer. This obvious utilization of a barrier layer would have produced the invention claimed in claims 8 and 9 produced by the method claimed in claim 14.

15. Regarding claim 22: Both Ito and Barmore recite binder materials comprising starch and protein. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the collagen or gelatin binder recited by Ito with crosslinking agent in order to produce a more cohesive coating and to control the rate of hydration of the coating allowing the coating to remain intact against the flow of high moisture meat product. Each of these benefits is explicitly recited by Barmore to be provided by the disposition of crosslinking agent in binder material. The advantageous disposition of crosslinking agent in the binder of Ito would have also produced a coating that was not water soluble or was only slightly water soluble.

16. Furthermore, it would have been obvious to one having ordinary skill in the art at the time the invention was made given the combined teachings of Ito and Barmore to have used gelatin or collagen for the protein based binder material disclosed by Barmore since these materials were disclosed in Ito to be useful binders. The selection of a known material based on its suitability for its intended use supports a *prima facie* obviousness determination. ("Reading a list and selecting a known compound to meet known requirements is no more ingenious than selecting the last piece to put in the last

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opening in a jig-saw puzzle.” *Sinclair & Carroll Co. v. Interchemical Corp.*, 325 U.S. 327, 65 USPQ 297 (1945) See also *In re Leshin*, 227 F.2d 197, 125 USPQ 416 (CCPA 1960) (selection of a known plastic to make a container of a type made of plastics prior to the invention was held to be obvious)) (MPEP 2144.07) This obvious substitution of known elements would have yielded the same invention claimed in claim 22.

17. Regarding claims 23, 24 and 26: Barmore clearly recites employing a third layer between the edible layer and thermoplastic layer. This third layer of Barmore is not disclosed to include crosslinking agent and would therefore be water soluble since it is disclosed to comprise water soluble materials such as alginate and hydroxypropyl starch. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have included this third layer when employing the edible film recited by Barmore since it is disclosed by Barmore to be useful. The obvious use of the embodiment of Barmore comprising this third layer in the casing of Ito would have produced the same invention claimed in claims 23, 24 and 26.

18. Regarding claim 27: Ito discloses the substrate may comprise natural or synthetic fibers. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have utilized a woven or knit material comprising natural or synthetic fibers for the substrate of Ito since woven and knit materials were universally known in the sausage casing arts at the time the invention was made. Therefore, the obvious modification of Ito with Barmore would have produced the same invention as claimed in claim 27.

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19. Regarding claim 28: Although Barmore does not disclose that the coating is rendered insoluble via treatment with smoke and/or by warming or heating, it is noted that “[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process”, *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985) . Further, “although produced by a different process, the burden shifts to applicant to come forward with evidence establishing an unobvious difference between the claimed product and the prior art product”, *In re Marosi*, 710 F.2d 798, 802, 218 USPQ 289, 292 (Fed. Cir.1983). See MPEP 2113.

20. Therefore, given that the modification of Ito with Barmore meets the requirements of the claimed casing, the modification of Ito with Barmore clearly meet the requirements of present claim 28.

Response to Arguments

21. Applicant's arguments filed 1/13/11 have been fully considered but they are not persuasive.

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22. In response to applicant's arguments on pages 11 and 12 of the remarks against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

23. Applicant's assertion on page 12 that Barmore requires the incorporation of plasticizer to impart flexibility is not accurate. Barmore discloses several embodiments of the coating recited, the only requirements being as recited in paragraph 11 of Barmore that the coating comprise a flavoring, a binder and a crosslinking agent. Any assertion by applicant throughout the remarks that Barmore *requires* plasticizer is **inaccurate** since this material is clearly disclosed to be optional.

24. Applicant's assertion on page 13 of the remarks that the third layer of Barmore is insoluble because it may "additionally or alternatively" comprise a crosslinking agent fails to establish that crosslinking agent is required for this layer. Therefore, this assertion is not found persuasive.

25. Applicant asserts on page 13 of the remarks that one of ordinary skill in the art would have effectively sought to dispose an additional layer of food on top of the transfer layer of Barmore in the modification of Ito with Barmore which would resulted in a two-layered transfer coating. This assertion is not logical since the transfer coating of Barmore would have already comprised food stuff to be transferred. As such, the examiner has clearly not "indulg[ed] in conjecture based upon hindsight analysis" as

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alleged by applicant. Therefore, this characterization of the result of combining the teachings of Ito with Barmore is not found persuasive.

26. Applicant's assertion regarding unexpected results on page 14 of the remarks are not found persuasive since as disclosed by Barmore, it was known in the art to employ a soluble transfer layer between the crosslinked coating and a substrate layer.

27. Applicant asserts on page 14 that the combination of Ito with Barmore would have necessarily resulted in the incorporation of soluble gelatin or collagen. However, this directly contradicts the teachings in Barmore of the utility of insoluble, crosslinked protein coatings. Gelatin and collagen are clearly proteins. Clearly one of ordinary skill in the art would have recognized that these coatings could be crosslinked in the same fashion as the protein materials disclosed by Barmore. Ito discloses the utility of these proteins for coatings. Obviously, in modifying the teachings of Ito with Barmore, one of ordinary skill would have sought to produce a crosslinked water insoluble coating.

Therefore, applicant's allegation of hindsight analysis is not found persuasive in light of the level of ordinary skill in the art and the teachings of the prior art.

28. Applicant's assertions on pages 14 and 15 of the remarks that Barmore merely teaches a release agent layer or a layer comprising crosslinker for the third layer is not found persuasive as explained above.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHELE JACOBSON whose telephone number is (571)272-8905. The examiner can normally be reached on Monday-Thursday 8:30 AM-7 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on (571)272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Michele L. Jacobson
Examiner
Art Unit 1782

/M. J./

/Rena L. Dye/
Supervisory Patent Examiner, Art Unit 1782